Scoparia noacki sp. n. – a new snout moth from the Philippines (Lepidoptera: Pyraloidea, Crambidae)

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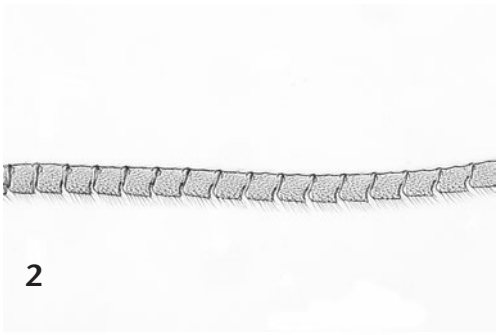
Abstract: *Scoparia noacki* **sp. n.** (holotype ♂ in Museum für Tierkunde, Dresden, Germany) is described from a submontane locality on the philippine island of Luzon. It is the seventh species of Scopariinae known from the Philippines.

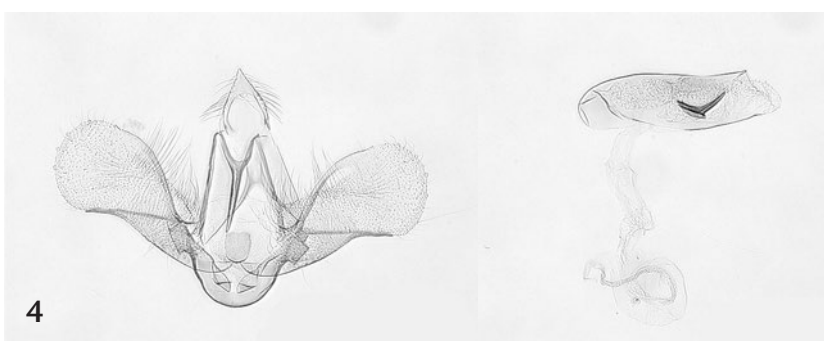
***Scoparia noacki* sp. n. – eine neue Zünslerart von den Philippinen (Lepidoptera: Pyraloidea, Crambidae)**

Zusammenfassung: *Scoparia noacki* **sp. n.** wird von einem submontanen Fundort auf der Philippineninsel Luzon beschrieben. Es ist die siebte Scopariinae-Art, die von den Philippinen bekannt ist.

Introduction

The Philippines belong to one of the 25 biodiversity hotspots – the areas with the richest reservoirs of plant and animal life on earth (Myers 1988). However, the primary rain forest of the Philippines has declined to seven percent by human activities and this is likely correlated with the most rapid and severe decline of species richness on a world wide scale; only the highest, most distant mountain ridges still retain primary forest (Heaney 1998). One group of animals especially for the study of these mountain biotas are the Scopariinae, a group of snout moths including more than 500 described species so far (Nuss 1999). Scopariinae occur throughout the world in the temperate zones of the northern and southern hemispheres, in tropical mountains and on oceanic islands. An overview of the Scopariinae from South-East Asia is given by Nuss (1998, 1999). According to these studies, only six scopariine species have so far become known from the Philippines. This is certainly an artefact caused to a large extent by difficulties in entering the mountain forests, e.g. due to guerrilla activities. In 2000, an expedition to the Philippine island of Luzon has been undertaken along the volcanic arc southeast of Manila.





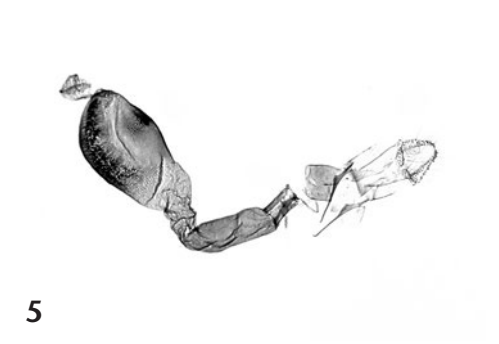


Fig. 1: *Scoparia noacki* sp. n., ♂ holotype. The photograph is taken digitally through an Olympus SZH 10 stereo-microscope using a plastic fiber-optics bifurcated illuminator. An oblique illumination against the wing surface has been used to increase the contrast of the pattern elements of the forewings. **Fig. 2:** *Scoparia noacki* sp. n., ♂ antenna (GU [= dissection number] Nuss 953). **Fig. 3:** *Scoparia noacki* sp. n., ♀ antenna (GU Nuss 954). **Fig. 4:** *Scoparia noacki* sp. n., ♂ genitalia (GU Nuss 953). **Fig. 5:** *Scoparia noacki* sp. n., ♀ genitalia (GU Nuss 955).

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During this work, one additional scopariine species has been discovered, which is here described.

Scoparia noacki sp. n.

Holotype: ♂ (fig. 1), "Philippines, South Luzon | Los Baños, Mt. Makiling | 14°08' N 121°14' E, 815 m | submontane forest, at light | 30. III. 2000, M. Nuss leg.", coll. Museum für Tierkunde Dresden.

Paratypes: 10 ♂♂, 14 ♀♀, same data, coll. Museum für Tierkunde Dresden.

Derivatio nominis: The new species is dedicated to state secretary Eckhard Noack (Saxonian State Ministry of Sciences and Arts) for his merits for the Museum für Tierkunde Dresden.

Description

♂ (Figs. 1, 2, 4): Forewing length 4–5 mm (holotype 5 mm). Labial palps porrect, 1.5× as long as diameter of eyes; maxillary palps brush like, upright; ocelli and chaetosemata present; flagellum thickened, flagellomeres prismatic (Fig. 2). Forewings blackish-brown, suffused with single contrastful white scales which form the interrupted antemedian and postmedian lines; antemedian stigmata and distal discocellular stigma black, but inconspicuous; the distal discocellular stigma X-shaped, filled ochreous; single ochreous scales are scattered over the median area of the wing. Hindwing pale brownish-grey.

♀: External appearence almost the same as in ♂♂, and forewing length of 4–5 mm identical to that in ♂♂. However, flagellomeres cylindrical (Fig. 3) and the forewings lacking ochreous scales.

♂ **genitalia** (Fig. 4): As typical for *Scoparia* Haworth, 1811 (cf. Nuss 1999); aedeagus with one thorn-like cornutus.

♀ **genitalia** (Fig. 5): Appendix bursae present; corpus bursae ovoid, with comb-like structure on the one side and densely covered by thorns on the other side, signum ovate; ductus bursae short, thick, without loops; colliculum and ovipositor short.

These features are typical for the genus *Scoparia,* with the exception of the signum on the bursa copulatrix, which usually occurs in species of *Eudonia* Billberg, 1820 (cf. Nuss 1999).

Diagnosis: On the Philippines, the genus *Scoparia* previously comprised four species — *S. meyi* Nuss, 1998, *S. monticola* Nuss, 1998, *S. philippinensis* (Hampson, 1917), and *S. spadix* Nuss, 1998. From these four species, *S. noacki* sp. n. differs by its narrow, dark colored and shining forewings with inconspicuous pattern elements.

Distribution: All specimens of *S. noacki* sp. n. known so far were attracted to lights during night at Mt. Makiling at an altitude of 815 m a.s.l. Other mountains have not been investigated at this or higher altitudes during this expedition. At Mt. Makiling, there are plantations of *Dipterocarpus* and Mahagony amidst the lowland forest, where some deciduous trees occur which were just opening there leafs. Above 500 m, there is completely evergreen forest. At 800 m submontane forest starts, with tree ferns, and at the peak (1144 m) there is montane moss-forest.

Remarks: Two collectings were made at the type locality (exactly at the same place), the first on March 16, 2000 and the second on March 30, 2000. However, *S. noacki* sp. n. has been found on March 30 only.

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